Pixel interpolation filters for video decompression processor

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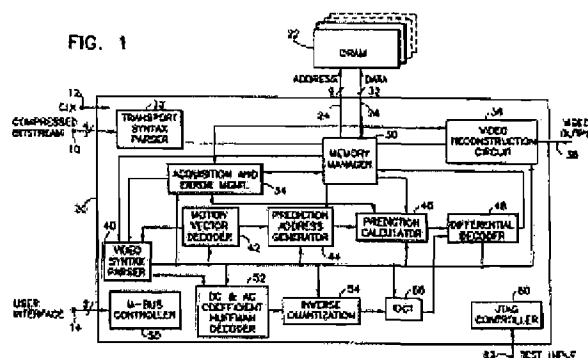- EP0712249 (B1)
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Cited documents:

- EP0572263
- EP0503956
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- XP000583293
- XP000378969

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Abstract of **EP0712249**

A method and apparatus are disclosed for interpolating pixels (80) to obtain subpels for use by a video decompression processor. A prediction area (90) is defined from which subpels are necessary to decompress a portion of a video image. Instead of reading all of the pixels from the prediction area and then processing them together to perform the necessary interpolation, portions of the pixel data are read and simultaneously averaged using in-place computation in order to reduce hardware requirements. Rounding of subpixel results is achieved using the carry input of conventional adders (114, 116, 118, 120, 148) to add a binary "1" to the averaged pixels, which are subsequently truncated (150) to provide the interpolated subpels.

FIG. 1